

# JORC Code, 2012 Edition – Table 1 Clermont Project

#### **Competent Persons Statement**

Mr. Jonathan Robbeson – BSc (Hons1), MEconGeol, MMinEng (CP Geo), is a full-time employee of Signature Gold Limited and is a registered Chartered Professional (Geology) with the Australasian Institute of Mining and Metallurgy (AusIMM – 304542). Mr Robbeson has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and the activity being undertaken to qualify as a Competent Person as defined in the Note for Mining Oil & Gas Companies, June 2009, of the London Stock Exchange and the 2012 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code). Mr Robbeson consents to the inclusion of the information in this release in the form and context in which it appears.

Mr James Yaxley – BSc (Hons), is a contracted employee of Signature Gold Limited and is a member of the member of the Australian Institute of Geoscientists (AIG). Mr Yaxley has relevant sufficient professional experience in mineralisation and deposit styles with in Signature Gold Limited's Tenure. Mr Yaxley qualifies as a Competent Person as defined in the Note for Mining Oil & Gas Companies, June 2009, of the London Stock Exchange and the 2012 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code). Mr Yaxley consents to the inclusion of the information in this release in the form and context in which it appears.

#### **General Information**

This report relates to the surface mineral exploration conducted at the Clermont Project of Signature Gold Limited.

The fieldwork was conducted by competent exploration teams and supervised by Signatures' Exploration Manager.

# **Section 1 Sampling Techniques and Data**

Criteria	Commentary
Sampling techniques	<ul> <li>Geochemical sampling is routinely conducted over the prospect area within the Project Tenement Suite.</li> <li>Channel samples, rock chip, stream, soil samples are routinely taken and sent to a NATA accredited laboratory for analysis.</li> <li>All samples are manually logged into the Signature "Site" and "Sample" booklets by field geologists. These booklet provide the hard copy data forms and evidence of field notes taken at the site, photos of filed sites and rock samples are also taken on some occasions. This data is manually entered into the geological database, crosschecked and validated prior to release.</li> <li>Field observations and alteration (with handheld SWIR detectors) are captured into the Signature Gold "Site Books". This data is manually entered into the geological database, crosschecked and validated prior to release.</li> </ul>
Drilling techniques	No Drilling is being reported in this release
Drill sample recovery	No Drilling is being reported in this release
Logging	No Drilling is being reported in this release
Sub-sampling techniques and sample preparation	No Drilling is being reported in this release
Quality of assay data and laboratory tests	<ul> <li>Geologists and field technicians at Signature Gold use methods comparable or better than industry standards for the collection, preparation and analysis of samples and assaying techniques.</li> <li>Samples are recorded in numbered calico sample bags and a water proof sample ticket representing each of the corresponding numbers on each bag are placed in the bag to ensure sample integrity and reporting. These sample numbers are cross referenced on each site location in the Signature Gold "Site" and "Sample Books". These booklet provide the hard copy data forms and evidence of field notes taken at the site.</li> <li>Samples are submitted to ALS where they undergo preliminary crushing to 70% passing a 6mm mesh. These are then riffle split to 3kg and pulverized and split to 85% passing 75 microns.</li> <li>Pulps are digested via four acid digestion dissolving nearly all minerals. Most of standard MeMS61r elements are then determined using ICP-MS and ICP-AES analysis.</li> <li>Gold assays are completed using fire assay and atomic absorption spectroscopy (AAS).</li> <li>Pulps are retained for future analysis, auditing and QA/QC integrity. After 6 months, the pulps obtained from surface geochemistry samples are discarded. Only drill ample pulps are retained indefinitely</li> </ul>

Criteria	Commentary
Verification of sampling and assaying	<ul> <li>Signature maintains a rigid QAQC program of all technical information that sits behind all release of assay results.</li> <li>Sample standards (std's) are allocated to the sample dispatch and selected at sample intervals by the geologist to reflect expected results as per the percentage of sulphides logged in geochemical samples.</li> <li>Sample runs with std's that are not within 2 standard deviations of the std's certified value are returned through the lab and re-run.</li> <li>Blanks are allocated at a rate greater than 5% of the total number of samples for each submission</li> <li>Sample runs with blanks that contain assayed Blanks that return a result of &gt;0.02 ppm get returned to the lab and re-assay</li> </ul>
Location of data points	<ul> <li>Grid system used by Signature Gold for the Clermont Project: WGS1984 - GDA1994 MGA94 (Zone 55).</li> <li>All geochemical samples are routinely picked up using a hand held GPS where the accuracy of current day systems are less than 5m in any x or y co-ordinate array.</li> <li>All major features, mine workings and trenches are initially picked up by handheld GPS until such a time where a registered surveyor will pick up these points if deemed important to do so.</li> <li>All boreholes that are located or are drilled by Signature are subsequently located on a Plane MGA94 Zone 55 system with levels reduced to the AHD (Australian Height Datum) by a registered surveyor.</li> <li>MGA Co-ordinates are derived from existing Geodetic Permanent Survey Marks for connection to MGA94.</li> </ul>
Data spacing and distribution	<ul> <li>Typically, rock chip samples, soil and stream sediment samples are routinely collected over time where field geologists need to fill gaps in technical knowledge over areas of interest.</li> <li>For major stream sediment sampling projects, such as was carried out over the Clermont Project, a structured grid pattern is initially measured out prior to mobilizing to the field at the head and tail of each catchment. Geochemical samples are then routinely collected at the intersections of these larger grid points.</li> <li>Rock chip samples were taken sporadically where suitable outcrop was located within the project area.</li> <li>All samples are manually logged into the Signature "Site" and "Sample" booklets by field geologists. These booklet provide the hard copy data forms and evidence of field notes taken at the site. This data is manually entered into the geological database, crosschecked and validated prior to release.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Some 20 mineralised prospects have been identified at the Clermont Project.</li> <li>Sporadic historical drilling targeted these mineralised veins which on most occasions dip steely.</li> </ul>
Sample security	• The chain of custody that occurs from when the samples is collected is maintained by senior personnel. i.e. senior geologist to the laboratory, then from the laboratory to the senior geologist.
Audits or reviews	<ul> <li>Exploration field teams are issued with approved plans and maps of the project areas by senior technical member of the exploration team at Signature Gold prior to mobilisation for any extended field trip to the project.</li> <li>The plans provide planned sample locations and all technical details, survey and reporting requirements.</li> </ul>

Criteria	Commentary
	<ul> <li>Once samples are collected, the field books, notes and digital data records are cross checked by a competent person on behalf of Signature.</li> <li>The samples are geologically logged by Signature personnel who prepare final sampling and submission sheets.</li> <li>The signed sample submission sheets as well as the samples to be assayed are delivered to the NATA accredited laboratory (ALS – Townsville) by a responsible person on behalf of Signature.</li> </ul>

# **Section 2 Reporting of Exploration Results**

Criteria	Commentary
Mineral tenement and	Mineral Tenement: EPM 26137 is held under the Mineral Resources Act 1989 (Qld)
land tenure status	Location: Queensland, 40 km NE of Clermont
	Ownership: Signature Gold Ltd 100%
	Joint Venture Interests: None
	Partnerships: None
	Overriding royalties: None
	Native title interests: Wangan & Jagalingou People and Bidjara People
	Historical sites: None mapped in exploration area by Signature Gold Limited
	Wilderness, national park and environmental settings: None
	• Security of tenure: The tenement is held under the Mineral Resources Act 1989 (Qld). There are no known impediments to obtaining
	a license to operate in the area.
Exploration done by	Historical sampling by other parties is summarised below:
other parties	Swiss Aluminium Mining Australia Pty Ltd. in 1971 explored for base metals, completed stream sediment & soil sampling with assays
	for Cu, Ni, Pb, Zn (CR 4052). Assay results and sample locations are shown on plans but copies of original laboratory assay sheets are not available.
	• Swiss Aluminium Mining Australia Pty Ltd. in 1972 completed rock chip sampling (assaying for Cu, Pb, Zn, Ni and Mo), petrographic descriptions (by HW Flanders of Central Mineralogical Services), and a reconnaissance geological sketch (CR 4507). Assay results and sample locations are shown on plans but copies of original laboratory assay sheets are not available.
	<ul> <li>Swiss Aluminium Mining Australia Pty Ltd. in 1978, explored for Uranium, completing water bore and rock chip sampling (assayed for U3O8), reconnaissance airborne radiometric and magnetic survey and a ground radiometric, (CR 6758). Assay results and sample locations are shown on plans but copies of original laboratory assay sheets are not available.</li> </ul>
	Geopeko in 1985 to 1986 completed geological mapping and outcrop sampling at 1:25,000 scale. An additional 30 samples were

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	collected for petrological examination and described by P Plibersek of Geopeko, Brisbane. Most samples were analysed for Au, Ag, As, Sb, Ba, Hg, Cu, Pb, and Zn. Several were analysed for Pt and Pd, and some for Ga, Nb, Ta, Th, Ti, U, V, W, Y and Zr. Assays were completed by Analabs and Tetchem Laboratories. Analabs used Method 101 (Cu, Pb, Zn & Ag), 329C (Au), 401 (As, Ba, Sb), 122 (Hg), 311 (Pt), and 312 (Pd). Tetchem used Method 401 (As, Sb, Ba, Ga, Nb, Ta, Th, Ti, U, V, W, Y, Zr), 101 (Cu, Pb, Zn, Ag), 122 (Hg) and 334 (Au). Detection limits are on the copies of the original laboratory assay sheets included in report CR 15717.  CQ Mines Pty Ltd in 1988 completed geological traverses and rock chip sampling. Tetchem Laboratories assayed for Au & Pt (Method 311), Ag, Cu, Pb & Zn (Method 101) with some Au (Method 313). Copies of original assay sheets are included in report CR 19202.  Ross Mining NL completed stream and rock chip sampling. Results are shown on a plan for Au, (ppb), Cu and As (ppm). It is not know which laboratory did the assays (CR 20372).  JR Ekstrom & KF Ford in in 1994 completed a program of prospecting, soil-stream sediment and rock chip geochemistry, ground magnetics and 42 percussion drill holes in the Fletchers Awl area. Petrographic descriptions on 13 rock samples were completed by Dr R Townsend at Analabs. Copies of original assay sheets are not available. All assay results are on Excel spreadsheets and appear to have all been by ALS and "TV". In the report in relation to the geochemical samples "ALS has retained the bulk of the pulps in case further assaying is required" (CR 27206).  Basin Gold Pty Ltd in 1999 re-evaluated historical data (CR 30842 and CR 31942).  Zamia Resources Pty Ltd in 2006 to 2008 (CR 49801, CR 54230 & CR 54343) completed over "Sally Ann" and "Aurora" Prospects osoil sampling of the "Sally Ann" Prospect and "Aurora" Prospect, assaying by ALS Chemex in Perth for Au, Ag, Cu, As, Te, and Sb (all by Method ME-MS17).  ofield mapping  petrological analysis (by Dr Al
Geology	<ul> <li>43665). Original assay sheets are not available but results are included in CR 43665.</li> <li>Deposit types:</li> </ul>
	<ul> <li>Intrusion Associated "Iron Oxide" Copper – Gold Systems (IOCG),</li> <li>ISCG styles of mineralisation; past exploration on the northern workings, indicates pyritic sulphides are far more abundant, hence the "Iron Sulphide Copper Gold" systems typified by Mount Lyell deposits, become prospective targets.</li> </ul>
	<ul> <li>Geological setting:         <ul> <li>The Clermont Project sits astride the NW trending Belyando-Saint Annes Trans-Lithospheric Shear Zone (BSATSZ), which broadly divides the Anakie Inlier (AI) into two distinct litho-structural domains. The northern half is dominated by covering volcanic and plutonic complexes of the Oweenee Cycle of the Connors Auburn silicic Large Igneous Province (KCA-LIP), with pronounced NE structural trends. Seismic surveys show a westward thrusting of the northern Anakie Inlier over younger basinal sediments of the</li> </ul> </li> </ul>

Criteria	Commentary
	Drummond Basin, undoubtedly reflecting the marginal effects of the major Permian thrust belts in the adjacent NEO.
	o The central portion of the Fletcher Awl Dome, consists of a Neoproterozoic-Cambrian gneiss – schist Metamorphic Core Complex
	(MCC) of the Anakie Inlier, intruded by an Early Ordovician granite, collectively referred to in the past as the Mooramin Granite,
	but referred to herein as the Mooramin MCC.
	<ul> <li>The oldest, unconformably overlying unit is the Mt Wyatt Formation, a marine sequence of quartzose and calcareous sandstone</li> </ul>
	/ limestone, micaceous siltstone and mudstone, with some intercalated volcanoclastics and andesitic to dacitic volcanics,
	representing erosional remnants of the once widespread Burdekin Basin.
	<ul> <li>The Mooramin MCC is however mostly mantled by much younger volcanics and sediments of the Devon-Carboniferous KCA-LIP</li> </ul>
	and Permian Bowen Basin and extensively overlain by Tertiary flood basalts and discrete centres of alkali rhyolites of the Peak
	Range Volcanics, as well as extensive alluvial cover .
	<ul> <li>The uppermost Devonian succession of intermediate to mafic volcanics, collectively referred to as the Greybank Volcanics, is</li> </ul>
	some 2,400m in thickness. The massive to porphyritic basaltic to andesitic lavas, breccias and tuffs are entirely terrestrial, as is
	most of the entire upper sequence Oweenee Cycle succession. The conglomerate member, examined in the field near the
	Transmitter Tower, is in fact an unconformable unit of inferred early Cretaceous age.
	<ul> <li>The successor early Carboniferous ignimbritic felsic volcanics have only vestigial presence along the SW margin, suggesting an</li> </ul>
	initial phase of mid Carboniferous uplift/doming. Several massive "ignimbritic dykes" within the Dome, may represent feeders to
	the overlying volcanics, alternately the volcanics may represent ignimbritic "outflow sheets" from caldera centres in the Silver
	Hills Volcanics to the west.
	<ul> <li>The associated strong magnetic anomaly (Mount Donald Anomaly), suggests this occurrence may be the apophyses of a deeper</li> </ul>
	plutonic mass. Variably interpreted, as a Devonian comagmatic intrusive (GSQ) to a Permo-Carboniferous (Signature) intrusive of
	the Kennedy Cycle.
	<ul> <li>Many of the known prospects and workings in the Clermont Project, are spatially associated with similar magnetic anomalies,</li> </ul>
	including Aurora and Bora.
	Style of Mineralisation:
	<ul> <li>The shear-vein and breccia type mineralisation of the Fletchers Awl Prospect, has similarities to the high level IOCG type</li> </ul>
	Magnetite and Hematite associations of the southern prospects.
	The Aurora host lodes are prominently banded in association with strong metasomatic carbonate-chlorite-epidote-(magnetite,
	pyrite) alteration. Gossanous massive malachite breccias, hosted in kaolinitic clayey host rocks are exposed in a partly filled in pit
	and adjacent shaft. Exposure appears to be in saprolite, although the clays may also represent argillic alteration.

Criteria	Commentary
	<ul> <li>Strong propylitic epidote-carbonate alteration is typical of peripheral zones and/ or late stage lower temperature overprinting.</li> <li>Pyrite-chlorite-sericite is also pervasive in some lodes as at Black Lode, and strong pyritic alteration was intersected in a waterwell drill hole near to the Sally Ann gold-copper occurrence. The selectively sampled sulphides had high precious metals and copper values: 37.5 g/t gold, 44 g/t silver and 10% copper.</li> <li>Relatively more abundance of sulphides in the Fletchers Awl Project, may indicate closer affinity to transitional IOCG-ISCG styles of mineralisation.</li> </ul>
Drill hole Information	No Drilling is being reported in this release
Data aggregation methods	<ul> <li>For weighted averages, composites are length weighted.</li> <li>Significant intercept results are compiled using a 0.25g/t Au lower cut-off value.</li> <li>No top cuts are applied to assay grades.</li> <li>Assays below detection limit are given a unique value of -0.00124 g/t in the Signature database.</li> <li>Intervals for which no assays were performed were assigned a unique value of -0.00123 g/t in the Signature database.</li> <li>Unique values are clearly discernable when completing geostatistical estimation methods and can be removed easily from any and all geostatistical reviews.</li> <li>Metal equivalent values are not being reported here.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>No Drilling is being reported in this release</li> <li>All release information is associated with surface exploration</li> </ul>
Diagrams	<ul> <li>All relevant plans and sections have been produced in MGA94 Zone 55 format and on a metric grid with North up.</li> <li>All images are correctly georeferenced.</li> </ul>
Balanced reporting	<ul> <li>Significant intercept results were compiled using a 0.25g/t Au lower cut-off value.</li> <li>All relevant information is presented in tables and figures</li> </ul>
Other substantive exploration data	<ul> <li>The primary airborne geophysical data was taken from QDME (North Bowen Basin) open file survey magnetics from flown in 2002 (at line spacing of 400m; flight direction of 90/270 degrees and a flight height of 80m). Signature has had this information reprocessed by Geoimage Australia, then re-interpreted the data. Images highlighting the geological and structural elements are included in the main body of this report.</li> <li>Gravity data from the Australian National gravity database was downloaded and reprocessed to produce a Straight Image of Bouger Gravity and Tilt Filtered Images of Bouger Gravity after applying an upward continuation of 200m.</li> <li>High-resolution MMI soil sample grids were placed by Zamia Resources over the "Aurora" and "Sally Ann" gold anomalies evident from results of historical stream and soil geochemistry results.</li> </ul>

Criteria	Commentary
	<ul> <li>In 2013 Signature completed a multi-element orientation stream geochemical survey.</li> <li>Further geochemical data, as outlined in Section 2 "Exploration done by other parties"</li> <li>Geological mapping and mine working GPS pickups from current exploration programs</li> </ul>
Further work	Results from this program will be incorporated into geological models and interpretations and further work will be determined based on the outcomes.

## **Section 3 Estimation and Reporting of Mineral Resources**

No Mineral Resources are being reported for the Project at this stage

### **Section 4 Estimation and Reporting of Ore Reserves**

No Ore Reserves are being reported for the Project at this stage